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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,841	01/30/2004	Roman Radon	P24668	2980
7055	7590	07/14/2005	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			IP, SIKYIN	
			ART UNIT	PAPER NUMBER

1742

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/767,841

Applicant(s)

RADON, ROMAN

Examiner

Sikyin Ip

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9, 10, 13, 15, 21 and 23-33 is/are rejected.
- 7) ☒ Claim(s) 6-8, 11, 12, 14, 16-20 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/15/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

The terminal disclaimer filed on April 15, 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of USP 6761777 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 103

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-5, 9, 13, 15, 21, 23-24, and 30 are rejected under 35 U.S.C. § 103 as being unpatentable over USP 5194221 to Culling (col. 3, lines 50-65, composition; col.

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4, lines 10-25, austenitic structure; col. 4, line 56 – col. 5, line 23, N solubility and FCC structure).

Claims 1-5, 9-10, 13, 15, 21, and 23-33 are rejected under 35 U.S.C. § 103 as being unpatentable over USP 4793875 to Larson (col. 2, lines 30-36, composition; col. 3, lines 25-51, N solubility; and lines 65-68, carbide and nitrides).

Claims 1-5, 9, 13, 15, 21, and 23-24 are rejected under 35 U.S.C. § 103 as being unpatentable over USP 4487630 (abstract, valve part; Table 1 in col. 3, composition; and col. 3, lines 37-49, chromium carbide and nitride)

Cited references disclose the features including the claimed compositions, austenitic FCC matrix, carbides, nitrides, and N solubility. Therefore, when prior art compounds essentially about "bracketing" the claimed compounds in structural similarity are all known, one of ordinary skill in the art would clearly be motivated to make those claimed compounds in searching for new products in the expectation that compounds similar in structure will have similar properties. In re Gyurik, 596 F.2d 1012, 1018, 201 USPQ 552, 557 (CCPA 1979); See In re May, 574 F.2d 1082, 1094, 197 USPQ 601, 611 (CCPA 1978) and In re Hoch, 57 CCPA 1292, 1296, 428 F.2d 1341, 1344, 166 USPQ 406, 409 (1970). As stated in In re Peterson, 315 F.3d 1325, 1329-30, 65 USPQ2d 1379, 1382 (Fed. Cir. 2003), that "A prima facie case of obviousness typically exists when the ranges of a claimed composition overlap the ranges disclosed in the prior art". Therefore, it would have been obvious to one of ordinary skill in the art to select any portion of range, including the claimed range, from the broader range

disclosed in a prior art reference because the prior art reference finds that the prior art composition in the entire disclosed range has a suitable utility. As stated in *In re Peterson*, 65 USPQ2d 1379, 1382 (CAFC 2003), that "A prima facie case of obviousness typically exists when the ranges of a claimed composition overlap the ranges disclosed in the prior art." Also see MPEP § 2131.03 and § 2123.

With respect to the recited relationship of claimed elements and PREN which would have been inherently satisfied by the alloy compositions of cited references since the elements and contents are overlapped.

With respect to alloying elements such as Mn content in claim 1 that Culling teaches 4 wt.% which is read on claimed "about 4.5 wt.%" because of the wording "about". Moreover, it is well settled that a prima facie case of obviousness would exist where the claimed ranges and prior art do not overlap but are close enough that one ordinary skilled in the art would have expected them to have the same properties, *In re Titanium Metals Corporation of America v. Banner*, 227 USPQ 773 (Fed. Cir. 1985), *In re Woodruff*, 16 USPQ 2d 1934, *In re Hoch*, 428 F.2d 1341, 166 USPQ 406 (CCPA 1970), and *In re Payne* 606 F.2d 303, 203 USPQ 245 (CCPA 1979). To overcome the prima facie case, an applicant must show that there are substantial, actual differences between the properties of the claimed compound and the prior art compound. *Hoch*, 428 F.2d 1343-44, 166 USPQ 406 at 409.

Allowable Subject Matter

Claims 6-8, 11-12, 14, 16-20, and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed April 15, 2005 have been fully considered but they are not persuasive.

Applicant argues that Culling discloses 4 wt.% Mn which is outside the claimed "about 4.5 wt.% Mn". 4 wt.% reads on "about 4.5 wt.%". The wording "about" does not require to be exactly same. See *In re Preda*, 159 USPQ 342 and *In re Ayers*, 154 F.2d 182, 69 USPQ 109 (CCPA 1946). Furthermore, it is well settled that a prima facie case of obviousness would exist where the claimed ranges and prior art do not overlap but are close enough that one ordinary skilled in the art would have expected them to have the same properties, *In re Titanium Metals Corporation of America v. Banner*, 227 USPQ 773 (Fed. Cir. 1985), *In re Woodruff*, 16 USPQ 2d 1934, *In re Hoch*, 428 F.2d 1341, 166 USPQ 406 (CCPA 1970), and *In re Payne* 606 F.2d 303, 203 USPQ 245 (CCPA 1979). To overcome the prima facie case, an applicant must show that there are substantial, actual differences between the properties of the claimed compound and the prior art compound. *Hoch*, 428 F.2d 1343-44, 166 USPQ 406 at 409.

Applicant's argument in paragraph bridging pages 17 and 18 of instant remarks is noted. But, Culling does not reject claims 1-24 in the previous office action. Instant claims 1, 3, 5, and 9 rejected by Culling contain Cr well within range of Culling.

Applicant's argument with respect Larson as set forth in page 19, second full paragraph of instant remarks is noted. But, the instant claimed "austenite matrix" does not define percentage of the austenite. Matrix merely means surrounding material.

Applicant's calculation in page 19 of instant remarks is noted. But, when narrow concentration ranges recited in instant claim 1 are used for recited expression in instant claim 1 which is way below claimed 1.5. Therefore, it is clear that applicant cannot use all upper or lower limits for calculation.

Applicant's argument with respect to Crook is noted. But examiner reiterates response set forth above that 5 wt.% is "about 4 wt.%".

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Applicant is reminded that when amendment and/or revision is required, applicant should therefore specifically point out the support for any amendments made to the disclosure. See 37 C.F.R. § 1.121.


Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Ip whose telephone number is (571) 272-1241. The examiner can normally be reached on Monday to Friday from 5:30 A.M. to 2:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Roy V. King, can be reached on (571)-272-1244.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


SIKYIN IP
PRIMARY EXAMINER
ART UNIT 1742

S. Ip
July 10, 2005